

REMARKS

This Amendment and Response is in response to the Office Action, dated January 16, 2003, where the Examiner has rejected claims 32-33, 40-42, 44-45, 54-56, 70, 73-84. By the present amendment, applicants have cancelled claims 40 and 54, amended claims 32, 44, 73 and 79, and added new claims 85-88. After the present amendment, claims 32-33, 41-42, 44-45, 55-56, 70, 73-88 are pending in the application. Applicants respectfully request an early allowance of pending claims 32-33, 41-42, 44-45, 55-56, 70, 73-88.

**A. Rejection of Claims 32-33, 40-42, 44-45, 54-56, 70, 73-84
 under 35 U.S.C. § 103(a)**

The Examiner has rejected claims 32-33, 40-42, 44-45, 54-56, 70, 73-84 under 35 U.S.C. § 103(a) as being unpatentable over Goldman (USPN 4,995,074). Applicants respectfully disagree.

In rejecting claim 40, the Examiner states "Goldman teaches the communication device keeping alive during said period of time, i.e. during hold period (col. 4 line 54 through col. 5 line 2) so that it would have been obvious to keep an upper layer protocol alive." Applicants respectfully disagree with the Examiner for the reasons that follow. Applicants would like to point out that according to the teaching of Goldman, interface 34 does not inform modem 36 and host 16 of the communication line interruption (see col. 4, line 62 - col. 5, line 11.) Rather, Goldman discloses that interface 34 "maintains the carrier to the host modem 36 and drops the terminal ready signal going to the host." Therefore, modem 36 receives the carrier signal and believes that there is a connection and host 16 is merely led to believe that terminal 14 is not ready, without realizing that the communication has been interrupted.

Applicants respectfully submit that there is no teaching or reference, whatsoever, in

Goldman regarding communication with an upper layer protocol. The cited excerpt by the Examiner (i.e. col. 4 line 54 through col. 5 line 2) merely discusses the communications between interface 34, modem 36 and host 16. Even more importantly, as discussed above, neither modem 36 nor host 16 is aware of the interruption, thus, without such awareness, neither modem 36 nor host 16 would execute a routine to keep the upper layer protocol alive.

Applicants would like to draw the Examiner's attention to the following portions of the detailed specification:

The remote modem must maintain the appearance of a connection to the upper layer protocols even though the connection to the local modem has been temporarily removed. Similarly, the local modem must maintain the appearance of the connection to the networking protocols using the communication capabilities of the local modem. To carry this out, the remote modem may be communicate with upper protocol layers of the network connection with manufactured data while in the hold mode. The local modem similarly maintains the appearance of a network connection with the application requiring the data by manufacturing data and presenting it to the network stack while the two modems are on hold. (Page 5, line 19 - Page 6, line 4.) (emphasis added.)

To achieve a continuous data session, when caller ID is received, the bottom two layers namely, the physical and the data link layer, responsible for transmission, framing, and error control of the communications link may be modified. In one embodiment, the keep alive functionality 323 within the ISP modem 321 transmits "keep alive" packet streams to the higher TCP/IP protocol layer after the modem signal is interrupted. This deceives the higher TCP/IP layers and prevents the session from terminating. The "keep alive" packet stream may be either data bits or control signals or both, and located within the client modem 301, the ISP modem 321 or both. (Page 18, lines 16-23.) (emphasis added.)

Accordingly, for example, a local modem in a hold state manufactures data and present such data to its upper layer protocol in order to deceive the upper layer protocol and create the appearance that such data is being received from the remote modem, although the data communication is in fact in the hold state. Applicants respectfully submit that Goldman does not

remotely disclose, teach or suggest keeping the upper layer protocol alive, since as stated above modem 36 and host 16 of Goldman are unaware of the communication line interruption, i.e. interface 34 maintains carrier to modem 36 and drops terminal ready signal to host 16. It should be noted that terminal ready signal is used for a variety of reasons and cannot be interpreted by host 16 as the communication line interruption in the absence of additional indicators. Accordingly, modem 36 and/or host 16 would not know when to manufacture data and present such data to the upper layer protocol to maintain the appearance of connection with modem 20, since modem 36 and host 16 are unaware of the communication interruption.

Applicants have amended independent claim 32 to include the limitations of cancelled claim 40. Accordingly, applicants respectfully submit that claim 32, and its dependent claims, should be allowed for the reasons stated above.

In addition, the Examiner has rejected claim 33 and stated that "Goldman teaches the hold request including the period of time (figure 4)." Applicants respectfully submit that the signal transmitted to the host, in figure 4 of Goldman, does not include "a period of time parameter." In fact, the decision "Has Time Out Occurred?" is made by interface 28 to determine whether a response has been received from interface 34 within a predetermined period of time. Goldman does not disclose or teach that the signal transmitted to interface 34 includes a period of time parameter. According to Goldman if interface 34 does not respond within a period of time that is monitored by interface 28, then interface 28 toggles central office, i.e. the modem connection will be lost; however, if interface 34 responds before interface 28 determines that the period of time has expired, then modems attempt to suspend the connection. Therefore, applicants respectfully submit that Goldman does not render claim 33 obvious.

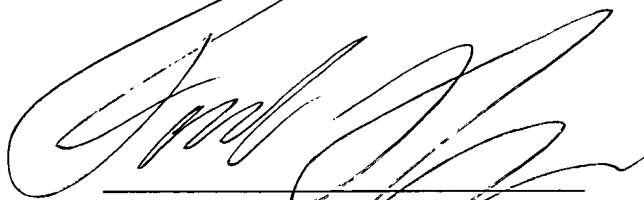
Furthermore, applicants have added new claim 85, which recites: "wherein said communication device keeps said upper layer protocol alive by manufacturing data and presenting said data to said upper layer to maintain an appearance of receiving said data from said remote device." For the reasons stated above in conjunction with patentability of claim 32, applicants respectfully submit that Goldman fails to remotely disclose, teach or suggest the limitations of claim 85.

Applicants have amended independent claims 44, 73 and 79 to include amendments similar to the amendments made to independent claim 32. Applicants respectfully submit that claims 44, 73 and 79, and their respective dependent claims, should be allowed for the reasons stated above.

B. Conclusion

For all the foregoing reasons, an early allowance and issuance of claims 32-33, 41-42, 44-45, 55-56, 70, 73-88 pending in the present application is respectfully requested. The Examiner is invited to contact the undersigned for any questions.

Respectfully Submitted;
FARJAMI & FARJAMI LLP



Farshad Farjami, Esq.
Reg. No. 41,014

Farshad Farjami, Esq.
FARJAMI & FARJAMI LLP
16148 Sand Canyon
Irvine, California 92618
Tel: (949) 784-4600
Fax: (949) 784-4601

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service "First Class Mail Post Office to addressee" Service under 37 C.F.R. Sec. 1.10 addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on 3/19/03.

Lori Llave
Name

Jeri Llave
Signature

Marked-Up Version of the Amended Claims

32. (Amended) A communication device for communication with a remote device over a communication channel, said communication device being in communication with a handset, said communication device comprising:

an off-hook detector capable of detecting said handset going off-hook, while said communication device is in communication with said remote device, and further being capable of generating an attention signal in response thereto; and

a transmitter capable of transmitting a hold request to said remote device in response to said attention signal;

wherein said handset is placed off-hook by a user for dialing an outgoing call, and wherein said communication between said devices over said communication channel ceases for a period of time after transmitting said hold request, and wherein said communication device keeps an upper layer protocol alive during said period of time.

44. (Four Times Amended) A communication method for use between a first device and a second device in communication over a communication channel, said first device being in communication with a handset, said communication method comprising the steps of:

detecting said handset going off-hook;

transmitting a hold request to said second device in response to said handset going off-hook;

ceasing said communication with said second device over said communication channel by said first device for a period of time; ~~and~~

causing a dial tone to be generated for dialing an outgoing call using said handset;

and

keeping an upper layer protocol alive during said period of time.

73. (Twice Amended) A first modem capable of communicating with a second modem over a communication channel, a portion of said communication channel existing over a telephone line between said first modem a central office, said first modem comprising:

a receiver capable of receiving a relinquishment request, while said telephone line is in use by said first modem for communication with said second modem, to relinquish said use of said telephone line; and

a transmitter capable of transmitting a hold request to said second modem to place said communication between said modems on hold;

wherein said communication between said modems is placed on hold and said use of said telephone line is relinquished, and wherein said first modem causes a dial tone to be generated over said telephone line after said communication between said modems is placed on hold, and wherein said first modem keeps an upper layer protocol alive while said modems are on hold.

79. (Twice Amended) A method of sharing a telephone line by a first modem capable of communicating with a second modem over a communication channel, a portion of said communication channel existing over said telephone line between said first modem a central office, said method comprising:

receiving a relinquishment request, while said telephone line is in use by said first modem for communication with said second modem, to relinquish said use of said telephone line;

transmitting a hold request to said second modem to place said communication
between said modems on hold;

placing said communication between said modems on hold;

keeping an upper layer protocol alive;

relinquishing said use of said telephone line; and

causing a dial tone to be generated over said telephone line.